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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,696	07/31/2003	Yu-Qi Wang		1612

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BACON & THOMAS, PLLC
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ALEXANDRIA, VA 22314

EXAMINER

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/630,696	WANG, YU-QI	
	Examiner	Art Unit	
	Leonid Shapiro	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 1-4, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Brocklin et al. (US 6,552,713 B1) in view of Reay et al. (US 6,449,858 B1).

As to claim 1, Van Brocklin et al. teaches device (See Col. 1, Lines 5-8), comprising a housing (See Fig. 8, items 68, 82, Col. 5, Lines 46-56);

a first convex surface correspondent to claimed first convex lens (See Col. 3, Lines 14-15) located upon the housing such that an object may be placed on the first convex lens (See Fig. 12, item 30, from Col. 6, Line 65 to Col. 7, Line 15);

a light source within the housing arranged to project light on the first convex lens (See Fig. 12, items 26A-26B);

a sensor located within the housing for sensing light reflected from the object when the object is placed on the first convex lens (See Fig. 12, item 22);

a second convex lens located between the first convex lens and the sensor for focusing light reflected from the object onto the sensor (See Fig. 12, item 66);

wherein said first convex lens and said second convex lens are arranged such that when an object contacts the first convex lens, light projected by the light source and reflected by the object is clearly focused on and detected by the sensor

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through the second convex lens (See Fig. 12, item 30, 66, 22, from Col. 6, Line 65 to Col. 7, Line 15);

wherein when the object slides over the first convex lens, the sensor detects a new image position so as to generate a corresponding electronic signal for transmission to a computer system (See Fig. 12, items 16, 30, 22, Col. 1, Lines 5-8 and Col. 7, Lines 8-12).

Van Brocklin et al. does not disclose first convex lens having two convex surfaces.

Reay et al. teaches convex lens having two convex surfaces (fig. 1, items 28-29, col. 7, Lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate teachings of Reay et al. into Brocklin et al. system in order to use in "mouse" (col. 2, lines 2-5 in Reay et al. reference) to shorten focal lens (col. 7, lines 2-3 in Reay et al. reference).

As to claim 2, Van Brocklin et al. teaches electronic signal is arranged to move a computer cursor (See Col. 1, Lines 5-8).

As to claim 3, Van Brocklin et al. teaches light beam evenly illuminating an entire surface of the first convex lens (See Fig. 12, items 26,30, Col. 7, Lines 3-8).

As to claim 4, Van Brocklin et al. teaches the pointing device is build-in to a housing of a computer (See Fig. 13, item 1302, Col. 5, Lines 3-5).

As to claim 7, Van Brocklin et al. teaches the first convex lens is a single convex lens and located upon the top of the housing (See Fig. 12, item 30, Col. 7, Lines 3-4).

As to claims 8, Van Brocklin et al. teaches the first convex lens is located upon in a front end of the housing (See Fig. 3, item 80, Col. 4, Lines 58-64).

2. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Brocklin et al. and Reay et al.

Van Brocklin et al. and Reay et al. teaches the first convex lens is located upon in a front end of the housing (See Fig. 3, item 80, Col. 4, Lines 58-64).

Van Brocklin et al. and Reay et al. do not disclose the first convex lens is located upon a lateral side of the housing.

It would have been obvious to one of ordinary skill in the art at the time of invention to locate the first convex lens upon a lateral side of the housing since Brocklin et al. teaches that optical pointing device to be removable and incorporated into external device (See Col. 4, Lines 7-10).

Response to Arguments

3. Applicant's arguments with respect to claim 1-4,7-9 have been considered but are moot in view of the new ground(s) of rejection.

Telephone Inquire

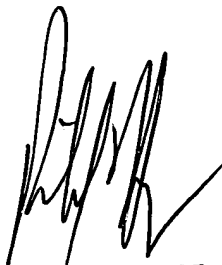
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LS
03.28.07



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGICAL CENTER 2600